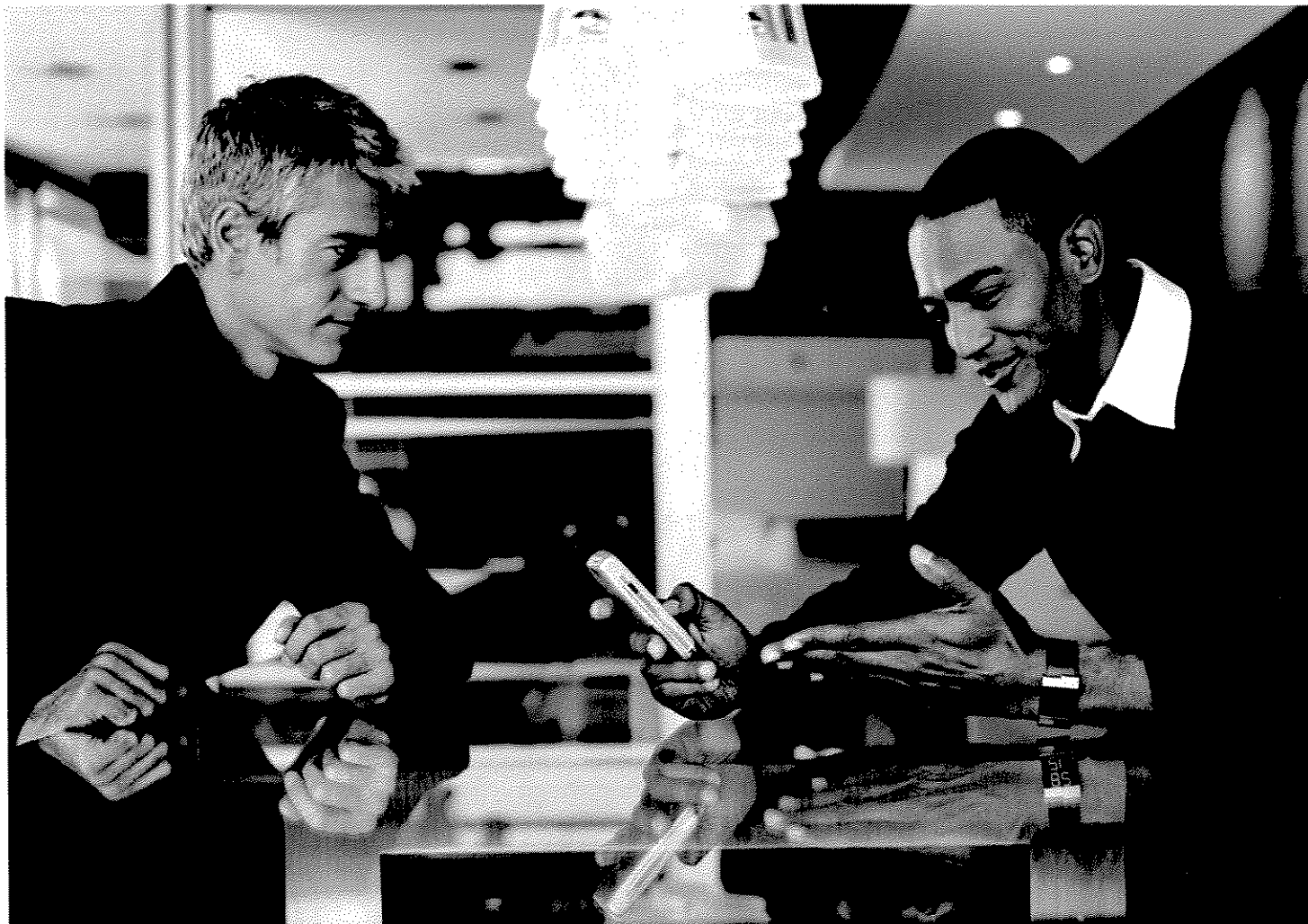


EXHIBIT F

The total solution for 3G profits with Nokia WCDMA



NOKIA
CONNECTING PEOPLE

Nokia WCDMA – the network that builds revenue

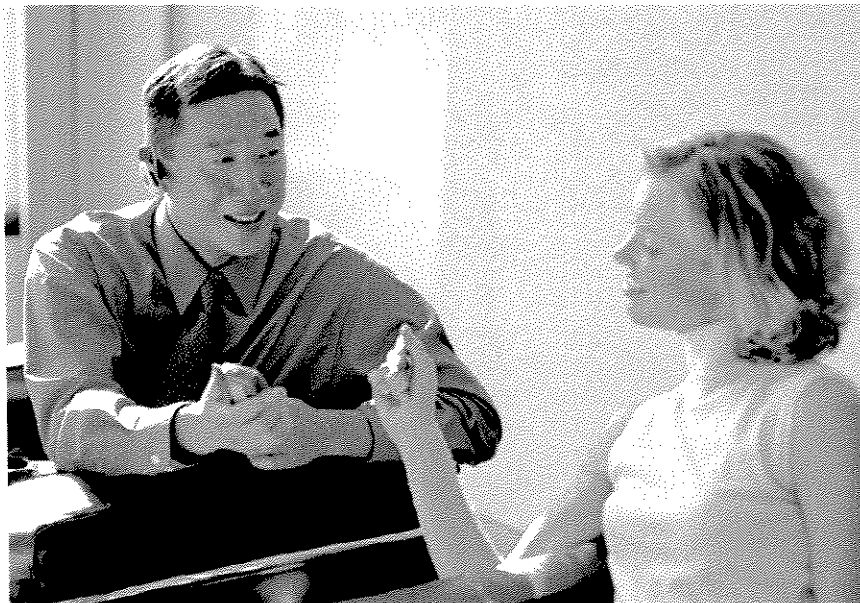
WCDMA 3G is a commercial reality. At the end of January 2005 65 WCDMA networks in Asia and Europe had already brought the benefits of faster delivery of services to more than 17 million subscribers.

To you as a mobile operator, WCDMA offers vast amounts of cost-effective capacity that will empower you to meet your subscribers' demands for more and more mobile services.

Services to excite your subscribers

With WCDMA, service developers now have unprecedented freedom from technical limitations to design completely new and exciting mobile applications. These help everyone in the mobile chain earn new revenue, including both the developers and you, the mobile operator. Video and audio streaming, web browsing and interactive gaming – with WCDMA you can satisfy your subscribers' desire to access and use rich services on the go.

WCDMA's fast data rates of up to 384 kbps and superb Quality of Service mechanisms also enable new applications combining both voice and data, such as video conferencing and enhanced corporate access services. You can also provide the basic services, such as voice, SMS and MMS, to a mass market.



Your business needs come first

Nokia's state-of-the-art WCDMA end-to-end solution is the most cost-effective way for you to turn these benefits into a competitive advantage.

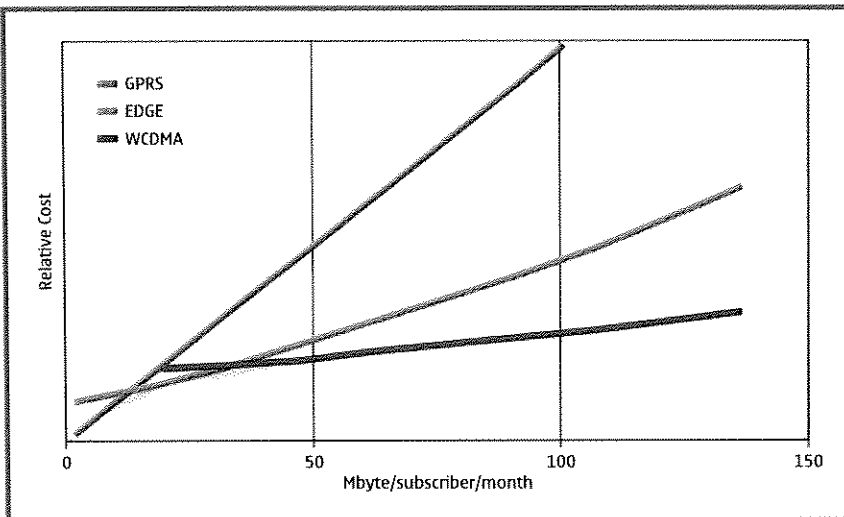
Nokia has spent more than a decade developing its WCDMA solution. Every step of the development process has been guided by operators' business needs. The result is a system that is not only

technologically advanced, but provides the means to fully realize the commercial aspirations of operators like you.

As the world's leading mobile handset vendor and a leading network infrastructure vendor, Nokia has the in-depth experience and advanced testing capabilities to create a commercially viable WCDMA system that is perfectly tailored to suit the requirements of your business and your customers.



WCDMA is the most cost-effective technology for transmitting combined voice and data.



Pay only for what you need

Additional revenue is just one potential benefit of Nokia WCDMA. You can also build your network with minimal investment. Reducing the cost of implementing WCDMA has been the other major influence on our development program.

You can deploy Nokia WCDMA at the lowest cost and the highest quality to meet your current needs. Then you can expand your network in line with your growing business. This is because Nokia WCDMA is flexibly scalable and minimizes your need to invest in surplus capacity.

Nokia WCDMA incurs low site costs. The system elements are all designed to achieve the highest capacity with the smallest site footprint. Not only do you save valuable site space, but you will need fewer base station sites.

Furthermore, our advanced remote operating features cut day-to-day expenses by helping you to avoid costly and time-consuming site maintenance visits.

Make your system future-proof

Nokia WCDMA re-uses your existing investment. Our solution complies with 3GPP standards and is fully interoperable with other vendors' network equipment. It can be built on top of your GSM or GSM/EDGE network, reusing your existing network assets throughout the system, from the radio network to both packet and circuit core domains and the Operations Support System.

This also applies if you choose to evolve to distributed network architectures with solutions such as the MSC Server System and the IP Multimedia Subsystem.

What's more, this is just the beginning. Soon you will be able to upgrade data speeds on your WCDMA radio network to a new level gaining up to three times more capacity using High Speed Downlink Packet Access (HSDPA) upgrade technology.

With Nokia WCDMA, you have a complete infrastructure solution to create a leading business with advanced mobile data and voice services.

We believe that Nokia can rightly claim to be the world leader in WCDMA infrastructure. By the end of January 2005 we had achieved:

- 45 WCDMA references with 25 system deals, 14 of which have Nokia as a sole supplier
- Nokia has supplied 29 of the 65 WCDMA networks in commercial operation
- Commercial system hardware deliveries since September 2001



Reliable access is the foundation of successful service revenue

Generating new revenue with WCDMA will depend largely on how well you can deliver services to mobile users. Users will only be satisfied when they can get the services reliably and at a quality that makes them easy and convenient to use.

Fulfilling this critical business need – while keeping costs to minimum – has been the driving force in the development of the Nokia WCDMA radio access network.

Seamless coverage encourages usage

Seamless coverage is vital wherever mobile subscribers are likely to access high-speed data services. Nokia's WCDMA Radio Access Network (RAN) has advanced 2G/3G interworking functions that, from day one, have been supported by Nokia WCDMA terminals. This lets you focus your WCDMA capacity on these locations, while using your existing radio network infrastructure elsewhere.

However, you may want to have a large footprint straight away for those services that benefit the most from WCDMA's high quality, such as video conferencing, audio and video streaming, high-speed corporate services and Push to talk over Cellular.

Nokia indoor coverage

Nokia's indoor coverage solutions provide excellent indoor coverage and capacity. While helping you keep costs to the minimum, they allow you either to re-use your existing 2G system or build dedicated WCDMA coverage. One example of the latter is the Nokia Advanced Indoor Radio (AIR) solution, which

- is fully integrated with base stations and the Operations Support System
- allows rapid coverage for new indoor revenue at offices, hotels, tunnels, shopping malls and sports and entertainment arenas
- yields significant savings in capital, operational and implementation costs.

With Nokia's unique site solutions that include elements such as the powerful yet compact Nokia MetroSite 50 base station you can boost WCDMA coverage and expand it to areas where costs might otherwise be unjustified.

Ensure effective indoor coverage

In GSM networks, more than 70% of traffic is created indoors. Effective indoor coverage is even more important with WCDMA, since dedicated systems are needed to ensure the availability of high-speed data connectivity to enable users to have access to their favourite services.

Nokia's indoor coverage solutions let you rapidly cover areas in which WCDMA presence is a must, such as subways, or where WCDMA can bring you completely new revenue, such as office buildings, hotels, shopping malls and sports arenas.

Terminals for GSM/WCDMA convergence

Nokia terminals offer excellent GSM, GPRS and WCDMA interworking capability. Nokia has introduced a total of five different GSM/WCDMA phones to date. The first terminal to combine the benefits of GSM, EDGE and WCDMA, the Nokia 6630 is available and the newly announced GSM/EDGE/WCDMA terminal, the Nokia 6680 will be available in 1Q 2005.

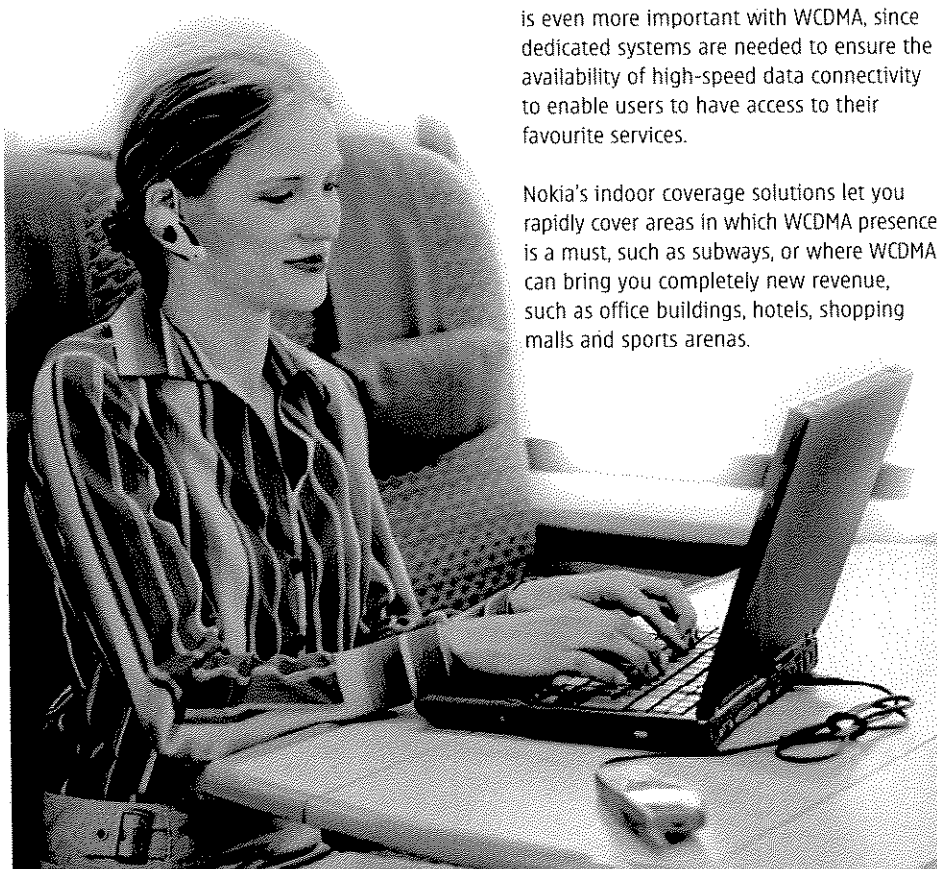
Nokia 6630 & Nokia 6680 imaging smart phones

- GSM/EDGE 900/1800/1900 and WCDMA 2100 MHz
- WCDMA PS 128 kbps UL, 384 kbps DL, WCDMA CS 64 kbps UL/DL
- 1.3 megapixel camera sensor
- 10 MB memory and hot swap memory card
- Multimedia messaging with video or audio clips
- Multimedia player with streaming support (Real Player)
- WAP 2.0, XHTML and HTML multimode browser
- MP3 player
- Email client with always on-line option
- OMA DRM 1.0
- Video sharing
- Push to talk capability over GPRS/EDGE or WCDMA (optional)
- Video call
- Video sharing in Nokia 6680 (optional)
- Two cameras in 6680 (front and back)

Nokia 6630



Nokia 6680





Nokia High Speed Packet Access (HSPA)

Nokia HSPA solution allows you to boost the data speeds and efficiency of your WCDMA network. Comprised of High Speed Downlink Packet Access (HSDPA) and High Speed Uplink Packet Access (HSUPA) technologies, it provides:

- downlink data speeds up to 14.4 Mbit/s*
- 100–200% higher base station capacity on the downlink
- uplink data speeds up to 5.8 Mbit/s*
- 20–50% higher base station capacity on the uplink
- simple evolution path – only software upgrade for existing Nokia network needed

*theoretical maximum value

Adjust the network to your changing needs

Your WCDMA business will evolve rapidly once launched. The Nokia WCDMA RAN is designed to be flexible enough to meet your changing business needs. The solution's dynamic Radio Network Controller (RNC) and its industry-leading traffic capacity enable your radio network to quickly and accurately meet changing traffic patterns, which minimizes the need to invest in excess capacity.

As your WCDMA business changes and expands over the longer term, the Nokia WCDMA RAN

offers a safe evolution path, allowing you to add and fine-tune capacity easily. Available in the near future, the High Speed Downlink Packet Access (HSDPA) technology will boost data speeds and data throughput of our networks to a completely new level on the downlink, while High Speed Uplink Packet Access (HSUPA) solution will soon follow to bring a similar boost on the uplink. Both technologies will be easy to add to your WCDMA base stations as a software upgrade.

Reduce operational costs

Operational costs are kept low too. The solution's comprehensive remote

control capability eliminates many of the site visits that would otherwise be needed to maintain the highest RAN efficiency. For example, the Nokia ReaTilt automatic antenna tilt function helps you fine-tune your coverage without the costs of sending a skilled engineer to the BTS site.

This combination of features to match your changing business needs, while keeping your capital and operational expenditure to a minimum, is among the many reasons why Nokia has become the industry leader in WCDMA radio access, with more WCDMA base stations delivered than any other company.

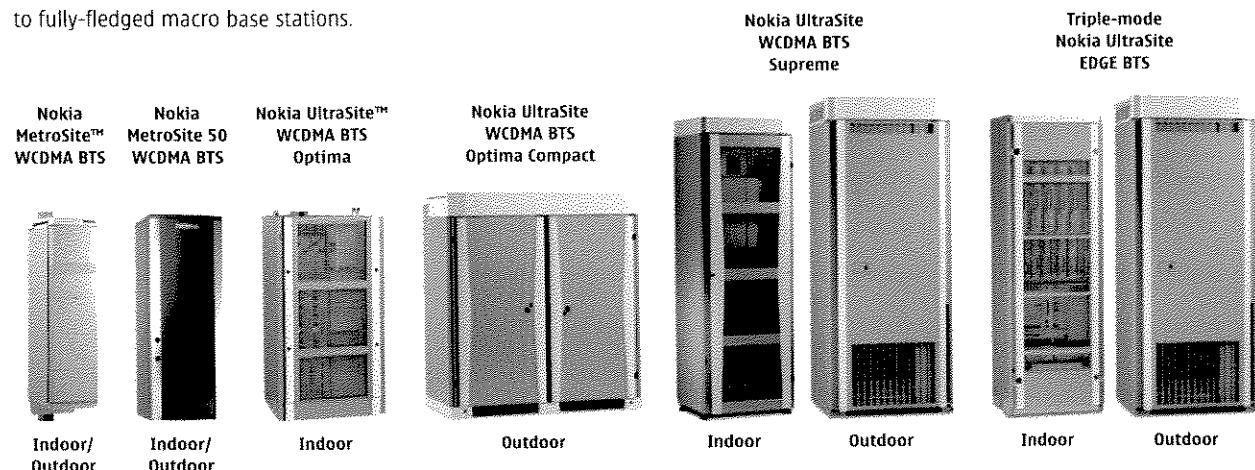
A WCDMA base station for every site

Nokia's WCDMA RAN solution offers the largest portfolio of base stations available on the market, ranging from 'siteless' indoor and outdoor solutions to fully-fledged macro base stations.

All Nokia WCDMA Base Stations provide:

- Excellent radio frequency performance, proven by data from commercial live networks
- Industry-leading capacity figures

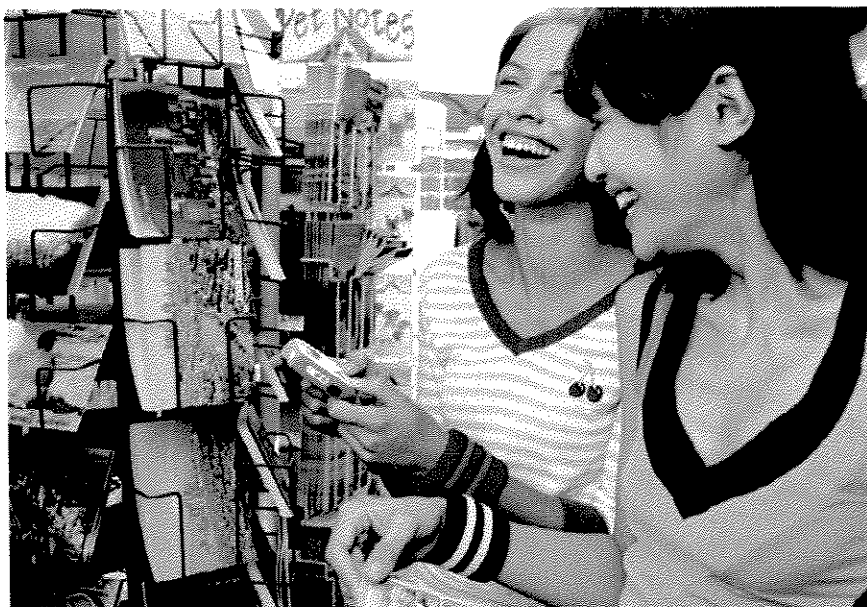
- Complete BTS sites, including everything from antennas and transmission products to back-up battery systems
- All site units integrated with the Nokia NetAct™ Operations Support System



A network core to boost data and voice profits

Nokia WCDMA's core network gives you the tools to stimulate traffic. Not only can you increase the penetration of mobile data services and boost their revenue, but you can build greater and more efficient voice capacity to meet the continuing demand for voice services.

What's more, if you are deploying WCDMA on top of an existing GSM/EDGE network, you can use the same circuit-switched and packet-switched core network for all your radio network assets, along with a shared Nokia NetAct™, which is the only fully-featured, multi-vendor, multi-technology Operations Support System (OSS) on a single platform.

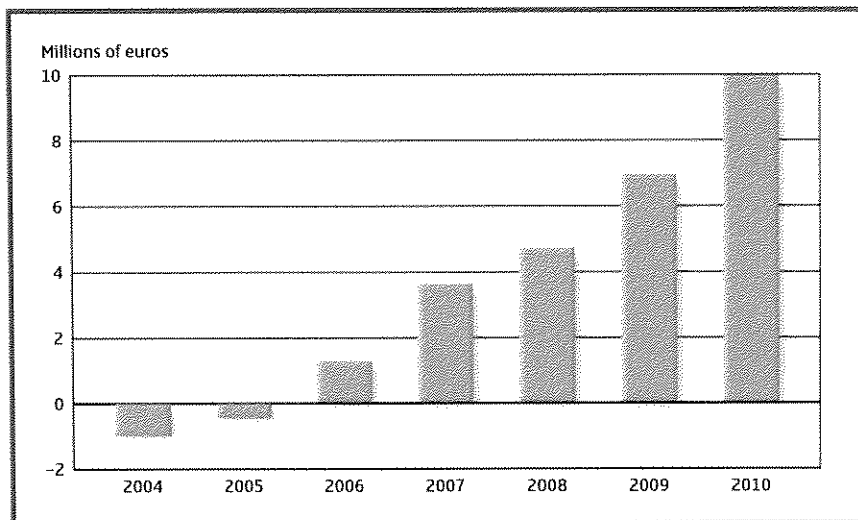


Nokia Service Aware Packet Core enables unique operations through:

- high capacity elements with carrier class reliability and flexibility
- "one click access" to all services – available via a single access point
- traffic analysis capabilities for service awareness and differentiated charging according to perceived value of the services
- subscription profiling
- online prepaid charging possible for all services
- service aware QoS for optimal radio network dimensioning

Grow your data service business with Nokia Service Aware Packet Core

The growing data services market offers many opportunities to differentiate your service offering in order to appeal to a variety of market segments. By providing a wide range of low penetration services targeted at different user groups, you are then able to achieve higher penetration of data services as a whole. Nokia Service Aware Packet Core provides the tools for subscription profiling and service awareness based differentiated charging that enable you to charge for services according to their perceived value by the users. This centralized, network based solution means you are able to continuously renew your content and services provision to your subscribers.



Cumulative savings with an MSC Server in an example network with 1.7 million subscribers.



The 3GPP Rel4 compliant MSC Server System is available now Lowest OPEX

- A common circuit switched core for GSM/EDGE and WCDMA
- Fewer sites and less floor space needed
- Transmission savings

Safest choice

- Evolution from Nokia MSC1 to MSC Server with a software update
- Field-proven quality
- Future-proof technology ensures long-term investment protection

Lower CAPEX and less OPEX with Nokia MSC Server System

Nokia's circuit core solution is based on MSC Server System architecture. MSC Server System can simultaneously support GSM, EDGE and WCDMA access systems in common or separate network elements. All existing Nokia MSCi network elements can be upgraded easily to MSC Server Systems.

MSC Server System architecture enables call control to be centralized at a few MSC Server sites, while the actual voice traffic can be switched locally, close to traffic hot spots. This brings savings in site costs, network operation costs and transmission costs. Implementing Voice over IP (VoIP) in the MSC Server System further cuts costs by simplifying network operation work and reducing the transit MSC layer.

Multi-vendor, multi-technology network management

Nokia NetAct is the only integrated network and service management system on the market for complex multi-vendor networks with both 2G and 3G technology. Based on open standards, Nokia NetAct gives you a clear picture of the entire network and the service quality that users are experiencing. With its powerful functions, you can set up mobile services to provide the best possible user experience.

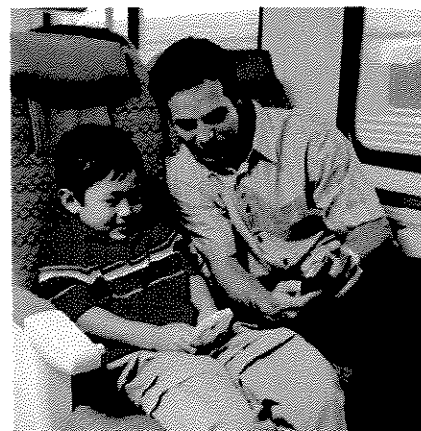
All the services and expertise for building total solutions

Nokia provides a full range of services for maintaining and optimizing network performance, training operator personnel and integrating solutions that enable new and exciting mobile services. To help you achieve further OPEX savings and focus on serving your customers, we also provide managed services covering network operations, turnkey network build, field maintenance, spare parts management, competence development and network optimization.

As for the revenue aspects, with Nokia FutureLab centers we enable you to identify opportunities for new and existing platforms and develop ready-to-launch services. We can also help you establish practical and proven procedures for launching, operating and maintaining advanced solutions.

Effective network sharing

Nokia can meet the needs of the many different approaches to network sharing. The world's first shared WCDMA network, supplied by Nokia, was started in Fall 2003 by 3GIS in Sweden.



Nokia NetAct provides:

- Management of multi-network, multi-service and multi-technology environments on a single platform
- One integrated network and service management system for GSM/EDGE and WCDMA networks



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